

## SEQUENCE LISTING

&lt;110&gt; TAM, Cherk Shing

&lt;120&gt; BONE STIMULATING FACTOR

&lt;130&gt; 32404-2054

&lt;140&gt;

&lt;141&gt;

&lt;150&gt; US 09/229,304

&lt;151&gt; 1999-01-13

&lt;150&gt; US 048,058

&lt;151&gt; 1998-03-26

&lt;150&gt; PCT/CA96/00653

&lt;151&gt; 1996-09-26

&lt;150&gt; US 60/004,314

&lt;151&gt; 1995-09-26

&lt;160&gt; 9

&lt;170&gt; MSWord

&lt;210&gt; 1

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

&lt;400&gt; 1

Ala	Glu	Leu	Arg	Cys	Met	Cys	Ile	Lys	Thr	Thr	Ser	Gly	Ile	His	Pro
1				5					10					15	

Lys	Asn	Ile	Gln	Ser	Leu	Glu	Val	Ile	Gly	Lys	Gly	Thr	His	Cys	Asn
		20						25					30		

Gln	Val	Glu	Val	Ile	Ala	Thr	Leu	Lys	Asp	Gly	Arg	Lys	Ile	Cys	Leu
		35					40					45			

Asp	Pro	Asp	Ala	Pro	Arg	Ile	Lys	Lys	Ile	Val	Gln	Lys	Lys	Leu	Ala
	50						55					60			

Gly	Asp	Glu	Ser	Ala	Asp
65					70

&lt;210&gt; 2

<211> 75

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

<400> 2

Asp Ser Asp Leu Tyr Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr  
1 5 10 15

Ser Gly Ile His Pro Lys Asn Ile Gln Ser Leu Glu Val Ile Gly Lys  
20 25 30

Gly Thr His Cys Asn Gln Val Glu Val Ile Ala Thr Leu Lys Asp Gly  
35 40 45

Arg Lys Ile Cys Leu Asp Pro Asp Ala Pro Arg Ile Lys Lys Ile Val  
50 55 60

Gln Lys Lys Leu Ala Gly Asp Glu Ser Ala Asp  
65 70 75

<210> 3

<211> 74

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

<400> 3

Ser Asp Leu Tyr Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr Ser  
1 5 10 15

Gly Ile His Pro Lys Asn Ile Gln Ser Leu Glu Val Ile Gly Lys Gly  
20 25 30

Thr His Cys Asn Gln Val Glu Val Ile Ala Thr Leu Lys Asp Gly Arg  
35 40 45

Lys Ile Cys Leu Asp Pro Asp Ala Pro Arg Ile Lys Lys Ile Val Gln  
50 55 60

Lys Lys Leu Ala Gly Asp Glu Ser Ala Asp  
65 70

<210> 4

<211> 73

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

<400> 4

Asp Leu Tyr Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr Ser Gly  
1 5 10 15  
Ile His Pro Lys Asn Ile Gln Ser Leu Glu Val Ile Gly Lys Gly Thr  
20 25 30  
His Cys Asn Gln Val Glu Val Ile Ala Thr Leu Lys Asp Gly Arg Lys  
35 40 45  
Ile Cys Leu Asp Pro Asp Ala Pro Arg Ile Lys Lys Ile Val Gln Lys  
50 55 60  
Lys Leu Ala Gly Asp Glu Ser Ala Asp  
65 70

<210> 5

<211> 81

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

<400> 5

Gly Lys Glu Glu Ser Leu Asp Ser Asp Leu Tyr Ala Glu Leu Arg Cys  
1 5 10 15  
Met Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Gln Ser  
20 25 30  
Leu Glu Val Ile Gly Lys Gly Thr His Cys Asn Gln Val Glu Val Ile  
35 40 45  
Ala Thr Leu Lys Asp Gly Arg Lys Ile Cys Leu Asp Pro Asp Ala Pro  
50 55 60  
Arg Ile Lys Lys Ile Val Gln Lys Lys Leu Ala Gly Asp Glu Ser Ala  
65 70 75 80  
Asp

<210> 6

<211> 85

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

&lt;400&gt; 6

Asn	Leu	Ala	Lys	Gly	Lys	Glu	Glu	Ser	Leu	Asp	Ser	Asp	Leu	Tyr	Ala
1				5					10					15	

Glu	Leu	Arg	Cys	Met	Cys	Ile	Lys	Thr	Thr	Ser	Gly	Ile	His	Pro	Lys
			20					25					30		

Asn	Ile	Gln	Ser	Leu	Glu	Val	Ile	Gly	Lys	Gly	Thr	His	Cys	Asn	Gln
		35						40					45		

Val	Glu	Val	Ile	Ala	Thr	Leu	Lys	Asp	Gly	Arg	Lys	Ile	Cys	Leu	Asp
		50					55				60				

Pro	Asp	Ala	Pro	Arg	Ile	Lys	Lys	Ile	Val	Gln	Lys	Lys	Leu	Ala	Gly
65					70					75					80

Asp	Glu	Ser	Ala	Asp
				85

&lt;210&gt; 7

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

&lt;400&gt; 7

Ser	Ser	Thr	Lys	Gly	Gln	Thr	Lys	Art	Asn	Leu	Ala	Lys	Gly	Lys	Glu
1				5					10					15	

Glu	Ser	Leu	Asp	Ser	Asp	Leu	Tyr	Ala	Glu	Leu	Arg	Cys	Met	Cys	Ile
			20					25					30		

Lys	Thr	Thr	Ser	Gly	Ile	His	Pro	Lys	Asn	Ile	Gln	Ser	Leu	Glu	Val
		35					40					45			

Ile	Gly	Lys	Gly	Thr	His	Cys	Asn	Gln	Val	Glu	Val	Ile	Ala	Thr	Leu
	50					55					60				

Lys	Asp	Gly	Arg	Lys	Ile	Cys	Leu	Asp	Pro	Asp	Ala	Pro	Arg	Ile	Lys
65					70					75					80

Lys	Ile	Val	Gln	Lys	Lys	Leu	Ala	Gly	Asp	Glu	Ser	Ala	Asp
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

85

90

<210> 8  
 <211> 79  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Chemically  
 synthesized polypeptide

<400> 8

Glu Gly Ala Val Leu Pro Arg Ser Ala Lys Glu Leu Arg Cys Gln Cys  
 1 5 10 15

Ile Lys Thr Tyr Ser Lys Pro Phe His Pro Lys Phe Ile Lys Glu Leu  
 20 25 30

Arg Val Ile Glu Ser Gly Pro His Cys Ala Asn Thr Glu Ile Ile Val  
 35 40 45

Lys Leu Ser Asp Gly Arg Glu Leu Cys Leu Asp Pro Lys Glu Asn Trp  
 50 55 60

Val Gln Arg Val Val Glu Lys Phe Leu Lys Arg Ala Glu Asn Ser  
 65 70 75

<210> 9  
 <211> 103  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Chemically  
 synthesized polypeptide

<400> 9

Met Thr Ser Lys Leu Ala Val Ala Phe Leu Ala Val Phe Leu Leu Ser  
 1 5 10 15

Ala Ala Leu Cys Glu Ala Asp Val Leu Ala Arg Val Ser Ala Glu Leu  
 20 25 30

Arg Cys Gln Cys Ile Asn Thr His Ser Thr Pro Phe His Pro Lys Phe  
 35 40 45

Ile Lys Glu Leu Arg Val Ile Glu Ser Gly Phe His Cys Glu Asn Ser  
 50 55 60

Glu Ile Ile Val Lys Leu Val Asn Gly Lys Glu Val Cys Leu Asp Pro  
 65 70 75 80

Lys Glu Lys Trp Val Gln Lys Val Val Gln Ile Phe Leu Lys Arg Thr  
                             85                            90                            95

Glu Lys Gln Gln Gln Gln  
                             100

<210> 10

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically  
                             synthesized polypeptide

<400> 10

Glu Ala Glu Glu Asp Gly Asp Leu Gln Cys Leu Cys Val Lys Thr Thr  
   1                            5                            10                            15

Ser Gln Val Arg Pro Arg His Ile Thr Ser Leu Glu Val Ile Lys Ala  
                             20                            25                            30

Gly Pro His Cys Pro Thr Ala Gln Leu Ile Ala Thr Leu Lys Asn Gly  
                             35                            40                            45

Arg Lys Ile Cys Leu Asp Leu Glu Ala Pro Leu Tyr Lys Lys Ile Ile  
                             50                            55                            60

Lys Lys Leu Leu Glu Ser  
   65                            70

<210> 11

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically  
                             synthesized polypeptide

<400> 11

Asp Ser Asp Leu Tyr Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr  
   1                            5                            10                            15

Ser Gly Ile His Pro Lys Asn Ile Gln Ser  
                             20                            25

<210> 12

<211> 14

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

<400> 12

Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Glu Ser  
1 5 10

<210> 13  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

<400> 13

Cys Met Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Gln  
1 5 10 15

Ser

<210> 14  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

<400> 14

Met Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Gln Ser  
1 5 10 15

<210> 15  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

<400> 15

Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Gln Ser  
 1 5 10 15

<210> 16

<211> 228

<212> DNA

<213> Artificial Sequence

<220>

<223> (1)..(225)

<220>

<223> Description of Artificial Sequence: Chemically  
 synthesized nucleic acid

<400> 16

GAC AGT GAC TTG TAT GCT GAA CTC CGC TGC ATG TGT ATA AAG ACA ACC 48  
 Asp Ser Asp Leu Tyr Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr  
 1 5 10 15

TCT GGA ATT CAT CCC AAA AAC ATC CAA AGT TTG GAA GTG ATC GGG AAA 96  
 Ser Gly Ile His Pro Lys Asn Ile Gln Ser Leu Glu Val Ile Gly Lys  
 20 25 30

GGA ACC CAT TGC AAC CAA GTC GAA GTC ATA GCC ACA CTG AAG GAT GGG 146  
 Gly Thr His Cys Asn Gln Val Glu Val Ile Ala Thr Leu Lys Asp Gly  
 35 40 45

AGG AAA ATC TGC CTG GAC CCA GAT GCT CCC AGA ATC AAG AAA ATT GTA 192  
 Arg Lys Ile Cys Leu Asp Pro Asp Ala Pro Arg Ile Lys Lys Ile Val  
 50 55 60

CAG AAA AAA TTG GCA GGT GAT GAA TCT GCT GAT TAA 228  
 Gln Lys Lys Leu Ala Gly Asp Glu Ser Ala Asp TER  
 65 70 75

<210> 17

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD\_RES

<222> (1)

<223> Xaa is N-acetyl isoleucine

<220>

<221> MOD\_RES

<222> (14)

<223> Xaa is serinamide

<220>



<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

<400> 17

Xaa Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Glu Xaa  
1 5 10

<210> 18

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD\_RES

<222> (1)

<223> Xaa is N-acetyl threonine

<220>

<221> MOD\_RES

<222> (8)

<223> Xaa is lysinamide

<220>

<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

<400> 18

Xaa Thr Ser Gly Ile His Pro Xaa  
1 5

<210> 1

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

<210> 19

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically  
synthesized polypeptide

<400> 18

Thr Thr Ser Gly Ile His Pro Lys  
1 5